

## Report

# Perspectives on Health and Social Welfare Problems in Japan Based on the Author's 42 Years of Experience in Preventive Medicine

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### Abstract

Based on my past experiences in the United States, where I learned how to adjust to a different society, as well as my experiences in other foreign countries I have visited for research purposes, I have attempted to predict health and welfare problems which may occur in Japan in the future from a global viewpoint.

Japan achieved the highest health level worldwide for its citizens after rebuilding the country following the devastation of World War II (WWII). This is a miracle of the 20<sup>th</sup> century. There are three reasons why Japan was able to accomplish this: rapid economic recovery after WWII by building up the infrastructure, the introduction of national health and social welfare systems for all Japanese citizens, and inscription of a large amount of national deficit-covering bonds to accelerate various kinds of national projects.

However, there has been a rapid increase in the aged population accompanied by a decline in the total population in Japan, and this trend has been accelerating. In addition, Japan is in the midst of a so-called “economic stagnation that happens once every 100 years.” Because of these two problems in Japanese society, there is a great deal of pessimism about the future health and social welfare of the society.

To prevent health and welfare from deteriorating further, I discuss the necessity of innovative thinking. Information transmission

utilizing internet technology is absolutely imperative, and an innovative model for preserving health and welfare is needed not only for the Japanese people, but for people in need throughout the world.

### Introduction

At the annual meeting of the Niigata Society of Health and Welfare on October 30<sup>th</sup>, 2010, I was honored to deliver a memorial lecture celebrating the society's 10th anniversary. The aim of this paper is to summarize that lecture in the following five sections: 1. My personal experiences in the past that have influenced my critical thinking on health and welfare problems, 2. Achievement of the highest health level in the world as a miracle of the 20<sup>th</sup> century, 3. Serious health problems that may occur in Japan, 4. Sweeping reforms in health and social welfare systems by means of life-innovation, a concept which will be explained later, and 5. Self-innovation for health professionals to solve health and welfare problems.

1. My Personal experiences in the past<sup>1)</sup> that have influenced my critical thinking on health and welfare problems

1) The movement by medical students to abolish the medical internship system in Japan

As part of the Japanese Student Movement of the 1960s, medical students angrily protested

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against Japan's medical internship system in the late 1960s. In accordance with the national student movement, I and fellow medical students in Niigata University of School of Medicine boycotted graduation tests and demonstrated to stop the internship system for about 5 months in 1968. This movement successfully ended in repeal of the medical internship system by the National Diet of Japan. Subsequently, we disbanded the movement and graduated from school in May of the same year. However, since no alternative training system was being provided for medical students, our next ordeal was trying to figure out how we could gain experience. From my experience participating in Japan's student movement, I had come to realize the value of having political power.

## 2) Experiencing social life in America after graduating from medical school in Japan

After graduating from medical school, I found a job as a research fellow in an epidemiology study center in the US. I began working at this center without an understanding of American culture and behavior. The biggest cultural difference I observed was that Americans worked very hard, and that this hard work was motivated by competition with each other. I realized that in the US, self-assertion preceded mutual concession. I observed self-assertion resulting in friction among many Americans.

Sekioka<sup>2)</sup> pointed out that American society is characterized by "post-adjustments of the difference of opinion" while Japanese society is characterized by "ante-regulations of the difference of opinion". Personally, I prefer doing "post-adjustments" after a fierce debate rather than "ante-regulations" before a debate, even though I am a member of Japanese society.

## 3) Serving society as a member of the Rotary Club

I first found out about the Rotary Club and their mission when I was 35-year-old graduate student in Texas. I was sponsored by Rotary

International in 1979, and was allowed to serve the society as a Rotarian after 1984.

I have continued to apply the mission of the Rotary Club in my life: "Make friends to foster the ideal of service, apply the ideal of service in personal, business and community life, and advance international understanding, goodwill, and peace through a world fellowship in the ideal of service."

## 4) Research career

The focus of my research has been the epidemiology of gall bladder cancer<sup>3,4)</sup> not only in Japan, but in foreign countries, including Chile, Hungary and Bolivia. I conducted an epidemiological study on gall bladder cancer in Japan over 15 years, and in the published study, attributed gall bladder cancer to a certain herbicide used in paddy fields<sup>5)</sup>. After this study was published, I was vilified for conducting this investigation into the causes of gall bladder cancer. I am also interested in studying the health effects of environmental contaminants such as arsenic, cadmium, and dioxins.

Since the subject of my research has been environmental contaminants that are produced by industrial activities, there have been repercussions from industries and the government, and I have also had to face a great deal of social pressure to stop conducting this research. Experiencing the repercussions from my research have taught me about the dark side of society.

## 5) School administration as a medical school dean

Late in my professorship in 2000, I was nominated to be the dean of the medical school, and remained in that position for 6 years. Japan restructured its national universities according by the 2004 National University Corporation Act, and during this time, I dedicated myself to helping the university transition to this new system. I was able to be effective in my job by implementing the "post-adjustments and ante-regulations" discussed in section 2. The latter

method is called “nemawashi” in Japanese, which is translated as “unobtrusively laying the groundwork in advance.”

In conclusion, I attempt to view challenges from various aspects. In particular, I view domestic matters in Japan from the global standards that I learned in the US.

## 2. Achievement of the highest health level in the world as a miracle of the 20<sup>th</sup> century

Before reporting on the levels of health and health indicators in Japan, the changes in health and social welfare policies after WWII are reviewed and summarized in Table1.

The year 1955 was a memorable year in post WWII politics with the formation of the Liberal Democratic Party (LDP) and reunification of the Japan Socialist Party (JSP). This political system was called “the 1955 system,” and played an important role in overall economic prosperity after WWII. One of the LDP’s platforms was to construct a welfare state. In 2009, the Democratic Party of Japan (DPJ) won a landslide victory over the LDP and became the ruling party of Japan. Under the LDP’s regime, Japan’s citizens had

among the best health and welfare conditions in the world, but gulf between rich and poor was causing inequalities. In 2005, the DPJ published “Eight pledges to transform Japan,” a so-called Manifesto, in which the DPJ pledged to Sweep away wasteful spending, Realization of a safe and secure society without inequalities and of everyday happiness, From concrete to people, Decentralization reform, Realization of an enlightened national interest, Promotion of greenery, food and agriculture, Toward a fair and transparent market economy and Real postal reform.

### 1) Levels of health indicators in Japan up to the present

An outstanding health indicator in Japan is life expectancy at birth. In 2009, life expectancy at birth was 79.59 years in males, which ranked the 5<sup>th</sup> in males after Qatar (2007), Hong Kong(2009), Iceland (2009) and Switzerland (2008), and 86.44 years in females, the highest life expectancy of females in the world<sup>6)</sup>. Several reasons for this long life expectancy in Japan have been reported<sup>7,8)</sup>. Health indicators, such as the infant mortality rate, neonatal mortality rate and

Table 1 Changes in Health and Social Welfare Policies in Japan after WWII

Period	Government	Health and Social Welfare Policies	Results/Prospects
Past	LDP (1955)	Stability of social welfare and becoming a welfare state after WW II.	Attained the best health and welfare conditions, but a gap in health occurred between rich and poor.
Present	DPJ (2009)	Policies for creating a safe and secure society. Shifting resources from concrete to human beings.	Trying to establish a safety net for the poor and lessen the gap between rich and poor.
Future	?	Concept of DPJ policies above may not be changed in the future.	Toward a welfare country like Sweden, or a neo-liberal country like the US?

Notes: LDP: The Liberal Democratic Party, DPL: The Democratic Party of Japan, QOL: Quality of Life

perinatal mortality rate are also the lowest in the world.

I would like to point out that we could accomplish a miracle of the 20<sup>th</sup> century, like a phoenix revived from the ashes of WWII. Especially, infant mortality rate is used as a part of living evaluations in economics. The lowest level, therefore, means that Japan has attained the high standard of living.

Demographic data<sup>6)</sup> on health in Japan is listed below:

- (1) Life expectancy at birth: 79.59 in males and 86.44 in females in 2009.
- (2) Proportion of the elderly (65 years and older) in the total population: 22.22 % in 2009.
- (3) Dependency ratio of aged population: 35.6 in 2009.
- (4) Infant mortality rate: 2.4/1000 live-births in 2009.
- (5) Neonatal mortality rate: 1.2/1000 live-births in 2009.
- (6) Perinatal mortality rate: 4.2/1000 (live-births, and still-births 22 weeks and after) in 2009.
- (7) Maternal mortality rate (ratio): 4.8/100,000 births in 2009.

## 2) Level of social welfare services in Japan<sup>9)</sup>

Health expenditure as a share of the GDP of Japan was 8.1 % in 2006, ranking 22<sup>nd</sup> among 31 countries, while in the USA it was 16.0 %, ranking first. Public social expenditure as a share of the GDP of Japan was 17.7 % in 2003, ranking 23<sup>rd</sup> among 29 countries. In Sweden, public social expenditure was 31.1 %, ranking first, and in the US, it was 16.2 %, ranking 26<sup>th</sup>. Based on these OECD health data, the health and social welfare levels of Japan seem pretty high despite the low proportion of expenditures on public social welfare and health as a share of the GDP.

## 3) Why did a miracle of the 20<sup>th</sup> century occur?

### (1) Economic recovery after WWII

Japan rebuilt itself after WWII ended in 1945,

and “the 1955 system” discussed above accelerated this process. The LDP made an effort to overtake advanced countries through economic development and to become a welfare state. Their particular focus was on public-driven administration, which resulted in the infrastructure getting built up. This improvement of the infrastructure then led to easy access to medical facilities, prevention of infectious diseases, a comfortable domestic environment and so on, resulting in a decrease in the mortality rates.

### (2) Legislation for a national health and social welfare system

The national health insurance system for all Japanese was introduced in 1958, and played an important role in prolonging life and subsequently enabling Japan to attain the highest life expectancy at birth in the world. The characteristics of this insurance are universal coverage for all residents in Japan, payment for benefits in kind and free access to any clinic or hospitals in Japan.

In 1961, three years after the national health insurance system was started, the national public pension system was introduced. The aim of this insurance was to support all residents of Japan after their retirement. In addition to the national insurance and pension systems, three major labor laws were passed: The Trade Union Act (1945), The Labor Relations Adjustment Act (1946) and The Labor Standards Act (1947). Passing of the Social Welfare Act (1951) and six other acts, The Child Welfare Act (1947), Act on Welfare of Physically Disabled Persons (1949), The Public Assistance Act (1950), Act on Welfare of Mentally Retarded Persons (1960), Act on Social Welfare Service for Elderly (1963), and Act on Welfare of Mothers with Dependents and Widows (1964) also played great roles in protecting workers' health, and in providing a safety net for economically disadvantaged persons, disabled persons, the elderly and women.

(3) Inscription of national deficit-covering bonds

National deficit-covering bonds were issued for provision against the recession that occurred after the Olympics were held in Tokyo in 1964. These bonds have continued to be issued up to the present. It was reported by a real-time clock<sup>10)</sup> that the total national deficit has reached about 1,118 trillion yen, which was over twice that of the GDP on October 30<sup>th</sup>, 2010, when this memorial lecture was presented. I personally think it is quite proper that a miracle of the 20<sup>th</sup> century easily happened, because we spent all the money that should have been reserved for the coming generation. As of the present date, the amount of deficit has reached about 8.77 million yen per capita.

3. Serious health problems that may occur in Japan

1) Background information

Background information will be presented in order to consider all aspects of the possibility that serious health problems may occur.

(1) Global changes in political and business climate after 1990

After the collapse of the Soviet Union in 1991, the cold war finally ended. Almost simultaneously, global diffusion of the internet began to occur. The rapid spread of the internet began in Japan in 1992. The internet is a communication tool that can be used to disseminate information worldwide without having to use regular mass-communication media, such as radio, TV and newspapers.

In the world economy, the so called “subprime shock” occurred in the New York stock market in 2007, followed by the “Lehman shock” in 2008. In the internet world, these events simultaneously affected the economy in Japan. It has been stated, ironically, that “if the USA has a cough, Japan suffers from pneumonia,” and Japan’s economy is now in poor shape, suffering from “stagnation that happens once every 100 years” (Quoted from

the speech by Alan Greenspan, Chairman of the Federal Reserve Board). Given these circumstances, policymakers in Japan are paying less attention to health and social welfare problems.

(2) Structural reforms conducted in Japan in the early 1990s

Due to structural reforms of the free market by the Government of Japan, a large number of part-time workers were needed, especially after the bubble economy collapsed in the early 1990s. As a result, there is more competition for part-time jobs, and poverty is increasing. The number of single households reached 22.4 % in 2006, and it has been reported that the death rates of single people have recently increased<sup>9)</sup>. The rates of unemployment, domestic violence and suicides have also gradually been increasing as a fall out of the economic recession.

2) Perspective on health and social welfare problems in the near future

After establishment of the 1955 system, the LDP passed many social welfare laws to support all people residing in Japan. From my perspective, the Japanese social welfare system after WWII functioned very well up to the 1990s. However, since Prime Minister Koizumi took office in 2001, many structural reforms based on neo-liberalism were made, and the gap between rich and poor increased. After the subprime shock in 2007 and the Lehman shock in 2008, the Japanese suffered the double blow of employment for unskilled type of job or unemployment. The increased suicide mortality rates may be reflecting a differential society which is economically deteriorating.

In addition to the socio-economic problems, depopulation is also a problem in Japan, and there is no decisive resolution to it. The population increase peaked in 2006, and the Ministry of Public Management, Home Affairs, Posts and Telecommunications has now officially declared that Japan has entered a phase of longstanding

depopulation. The National Institute of Population and Social Security Research has reported future population projections up to 2055, based on data from the 2005 population census and vital statistics<sup>11)</sup>. The population in 2055 is expected to be about 90,000,000, a decline of about 38,000,000 people over only 50 years. By means of the same medium-variant projection, the proportion of the population 65 years and older was projected to increase to 40.5% from 20.2% over the same 50 years.

The proportion of mortalities of persons aged 65 years and older to the total mortalities are now 83.3 % (2007), ranking third after Sweden (85.7%, 2005) and Italy (85.0%, 2003)<sup>6)</sup>. However, the numbers of deaths of persons aged 65 years and older seem more prevalent in Japan because of the rapid growth of the aging population compared to that worldwide.

Due to Japan's currently tight budget, the poor have less access to the national health insurance system, and the differences in health between the rich and the poor may thus be increasing.

Additionally, there may be problems with the national health insurance system in the future because of high expenditures by aged persons in ill-health and because of serious national budget deficits. In fact, life expectancy at birth for males in Japan fell to the 5<sup>th</sup> ranking worldwide in 2009. This is the first time in 36 years that the ranking fell below 4<sup>th</sup> in the world.

Liberation of trade, in particular the deregulation of medicines and introduction of a private health insurance system will be accelerated by pressure from foreign countries, and subsequently related laws, such as the National Health Insurance Act, will be revised.

A mixed payment system in which basic treatment is covered by the national insurance system and more advanced treatment by private insurance will be more frequently used by the rich. In addition, medical tourism will be developed for rich people, especially those from

our country to Asia and the Pacific region or vice versa.

Another change to the current health care system may exclude the care for patients with brain death. In Japan, there is a double standard for determining death: brain death by The Organ Transplantation Act (1997), and ordinary criteria, characterized as the cessation of the heartbeat in clinical settings. However, in the future, treatment after brain death may not be covered by the national health insurance system because of budget deficits. The private health insurance system may be able to cover treatment after brain death if relatives want the patient to continue to get care.

There is no successful model in place anywhere in the world to try to resolve the problems discussed above. New ideas and new methods are needed. In other words, innovative thinking is needed.

#### 4. Sweeping reforms in health and social welfare systems by means of life-innovation

##### 1) An introduction to the concept of innovation

Schumpeter<sup>12)</sup> once wrote that "innovation changes the values onto which the system is based." Here, innovation means "the introduction of new things, ideas or ways of doing something." It is often called "creative destruction" and starts from the origination of new ideas in opposition to common knowledge and ends in a new beginning by destroying old systems in a society. Those who can conduct "creative destruction" are called innovators or pioneers, and are often alienated from society. According to Kurokawa<sup>13)</sup>, in Japan innovators are called "Derukui (the nail that sticks up)", based on a Japanese proverb, which states that "The nail that sticks up gets hammered down".

Kondratieff pointed out that innovation occurs every 50 to 60 years. This is called Kondratieff's cycle. It is interesting that 65 years have passed since WWII, and 55 years since "the 1955

system”, which played an important role in the overall economic prosperity after WWII. I feel that the time has come to think of innovative ideas to resolve problems with the health and social welfare systems in Japan.

2) Newly proposed health and social welfare policies, called “life innovations” by Prime Minister Kan

In a June 2010 address to the National Diet, the DPJ Prime Minister Naoto Kan proposed policies to revive and overcome the difficulties of the last two decades. He expressed regret about the public-driven administration and free economic policies based on the new-liberalism of the LDP era, and proposed a new path for revitalizing Japan. His policies consisted of 7 growth areas and 21 national strategic projects. One of his policies was the development of “life innovation.” His aim is to revive a strong economy by changing medical care and other related facilities into growth-driving industries and to promote the growth of the Asian economy as a market by making use of advanced medical and health knowledge and techniques. In making a rough estimation for the new projects in 2011 from each Ministry of Japan, new principle of 10 % reduction of the rough estimate of new projects from each Ministry of Japan was requested so that “special reserves in the budget” for about 1 trillion yen were then provided. “Life-innovation” may play an important role in resolving health and social welfare problems in Japan in the future.

5. Self-innovation for health professionals to solve health and welfare problems

1) Putting innovation into practice to resolve health and welfare problems

When the Nobel laureate Esaki<sup>14)</sup> addressed a meeting of the graduates of the Niigata University School of Medicine in 1996, he talked about the secrets to winning a Nobel Prize. The key points he made are very useful for critical thinking on

putting innovation into practice.

(1) Discard useless information

First, it is necessary to question the veracity of information appearing in the mass media. A typical example is a photograph of an oil-soaked marine bird used to justify the Persian Gulf War<sup>15)</sup>.

Some information on the internet are compatible with the fact although the truth and false are all intermingled. I often search the internet in English to obtain information about Japan which is not disclosed in Japanese media to the Japanese public. For example, I researched information on the large-scale O157 food poisoning that occurred in Sakai City<sup>16)</sup> and found information about the consequences of the incident in English, which was very different from the information reported by the mass media in Japan. The reports on Japanese affairs in English may contain accurate information.

(2) Question what authorities say

For example, in 2006, there was a change made to Japan's elderly healthcare system. At that time, the healthcare system for individuals aged 75 and over or aged 65 and older with a disability was separated from the ordinary National Health System, and this system is now functioning despite hostile criticism against the Ministry of Health, Labor and Welfare. The separation of the two healthcare systems is a deplorable plan to reduce the amount of medical expenditures for the aged. In fact, about one third of the total medical expenditures (about 10 of 33 trillion yen) were spent by people aged 75 years and older.

My opinion is that the aim of this legislation was not only to cut costs, but to withdraw a portion of Japan's population from the National Health Insurance System, so that the system will no longer serve everyone. Persons aged 75 and over must now pay 10 % of the insurance premium, and in some cases the insurance premium will be deducted from pensions. There will definitely be insurance premium rate

increases for the elderly in the future, and adduction of the premium from elderly people's pensions will be a double financial whammy for them. As a result, medical refugees who cannot afford to pay into the health insurance system will be produced. The deregulation of medicines and the growth of a private health insurance system, especially for the aged, has been accelerated by this legislation reforming the health system for the aged.

(3) Don't stick to common sense

"Think globally, act locally" was a campaign slogan for environmental protection in the 1970s. Since then, this slogan has been used in many contexts. "Think globally, act locally" is a concept that has strengthened environmental regulations in Japan based on the world standard.

To resolve the health and social welfare problems occurring in Japan, we need to "Think locally, act globally"; in other words, apply innovative ideas to resolving of local problems. The solutions we come up with may then be used by other nations.

(4) Don't be afraid to defend your scientific discovery

After graduating from the School of Public Health at the University of Texas in 1980, I decided that as an epidemiologist, I would investigate the health problems that were prevalent in the community where I lived. I was deeply concerned about the high mortality rates of gallbladder cancer in Niigata. I was 50 years old when I reported that a certain herbicide might be responsible for the occurrence of this cancer. After this report was published, I had to struggle to defend myself against political opinions from both the promoters of the commercial use of agricultural chemicals and the forces that opposed them.

Nonetheless, during the controversy I stuck to my principles despite advice from health authorities who whispered in my ear to withdraw my opinion that this herbicide might be causing

the cancer in order to protect myself and my job. Years later, further data substantiated that the gallbladder cancer was caused by this certain herbicide with the evidence that the mortality rates especially for the number of female cancers have been declining and geographical clustering of mortality rates had disappeared in Niigata.

(5) Don't lose youthful enthusiasm to the pursuit of scientific truth

I would like to end this section by quoting the opening to a poem by Samuel Ullman<sup>17)</sup>, who is greatly admired by the Japanese. "Youth is not a time of life; it is a state of mind; it is not a matter of rosy cheeks, red lips and supple knees; it is a matter of the will, a quality of the imagination, a vigor of the emotions; it is the freshness of the deep springs of life." Youthful enthusiasm is needed to pursue scientific truth.

2) Health and welfare benefits that should not be changed in Japanese society

Any future systematization of health and social welfare policies should be undertaken with the concept that there should be equality among all members of a community, and that reciprocal help should be given. Altruistic values such as gentleness, kindness, showing courtesy to others, and being modest and deferential should be the basis of any policy reforms in Japan.

At the least, the national health insurance and national pension systems should be retained, because they function as safety nets for the aged and the poor. It is a shame that these traditional systems are being reformed due to liberalization and deregulation pressures from foreign countries.

3) The five STEPS as a mission of the Niigata University of Health and Welfare from the point of view of innovation

The University was established in 2001, the first year of the new millennium. At the time of its establishment, a mission statement was declared: to provide qualified Quality of Life (QOL) supporters to those who need help



accessing health and social welfare services, to contribute to the community, and to promote international exchange in order to advance mutual understanding and cooperation in the field of health and social welfare. On the occasion of the 10<sup>th</sup> anniversary, we propose minimum requirements needed to become qualified QOL supporters, who can work not only in local communities, but also in the world. These requirements are called “the five STEPS for qualified QOL supporters”. The STEPS are the initial letters of the following words:

(1) Scientific reasoning based on evidence:

The main specific behavioral objective (SBO) of this step is to gain basic knowledge and techniques about each specialized area of professions based on evidence-based health and social welfare.

(2) Teamwork and leadership:

To work well together as a team consisting of persons from various professions at each setting where social services are provided to clients and hopefully people in the team should take leadership for resolution of the health and social problems of the clients.

(3) Empowerment and communication skills:

To empower clients to make decisions, and take actions, to improve their QOL. To empower clients, professionals need to master communication skills.

(4) Problem-solving:

To point out a problem or difficult situation encountered, to suggest the best method of solving the problem to the team, and to take the initiative in carrying out the plan.

(5) Self-realization:

To make every effort to the best of his/her own ability to accomplish the goal, and to then feel a sense of accomplishment.

We have two objectives for achieving innovation: problem-solving and achieving self-realization. Innovators must have the ability to solve problems and achieve self realization in

order to come up with new ideas for better health and social welfare. Needless to say, we place a special emphasis on scientific reasoning based on evidence for ordinary QOL supporters, but innovators should transcend already known scientific knowledge and techniques.

## Conclusion

Deterioration of health and social welfare conditions is inevitable in Japan because of the increasing aged population accompanied by depopulation and the so-called once in a 100 years economic recession. To prevent deterioration from occurring, innovative thinking is needed. As members of the Niigata Society of Health and Welfare, we need to think positively and take a first step toward addressing this issue. To that end, presenting an innovative model not only for the Japanese people, but also for those who need it in the world is extremely important, and is needed now more than ever before because information transmission utilizing internet technology is absolutely imperative in the current era.

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